

OXYGEN PRODUCTS COMPANY

Cable Address
"REINFORCED" Pittsburgh
Iron Age Code on page 8

MAIN OFFICE

Morris Bldg., PHILADELPHIA, PA., U.S.A.

FACTORY

2525 Liberty Ave., PITTSBURGH, PA.

EXPORT OFFICE

Hudson Terminal Bldg., NEW YORK, N. Y.

Manufacturers of Oxygen-Hydrogen Generating Equipment and Accessories

Products

SEAMLESS STEEL CYLINDERS
CYLINDER VALVES
OXYGEN-HYDROGEN GENERATING EQUIPMENT
WELDING AND CUTTING TORCHES
PRESSURE REGULATORS

Seamless Steel Cylinders

Made in U. S. A. All the steel cylinders constructed by this Company are manufactured and tested in accordance with the specifications of the Interstate Commerce Commission and test certificates are furnished.

TYPES—Cylinders are made to contain Oxygen, Hydrogen, CO₂, Chlorine, etc.

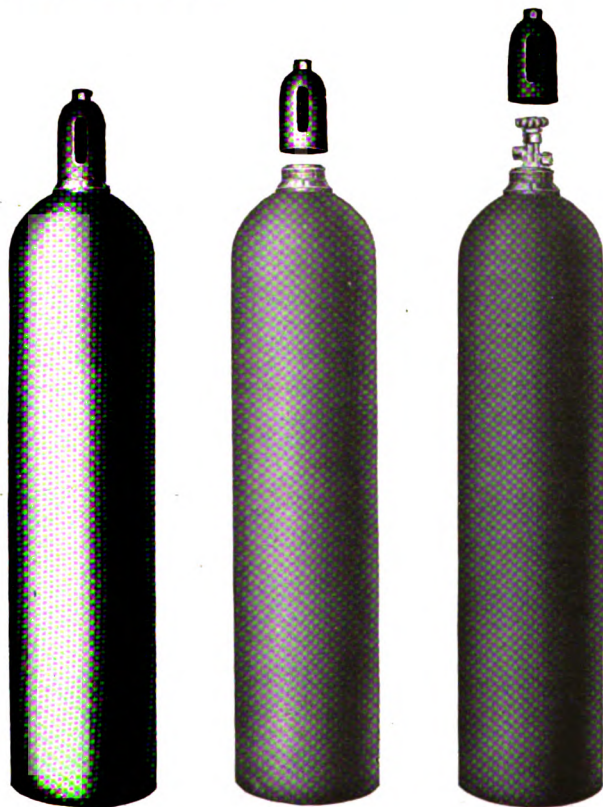


FIG. 1. SEAMLESS STEEL CYLINDERS
For containing Oxygen, Hydrogen, CO₂, Chlorine, Etc.

TABLE I. SPECIFICATION DATA—OXYGEN AND HYDROGEN STEEL CYLINDERS

Size No.	Length		Length with cap		Inside diameter		Weight with cap		Capacity				General capacity	
	in.	mm.	in.	mm.	in.	mm.	lb.	kg.	cu. in.	liters	cu. ft.	cb. m.	cu. ft.	cb. m.
D 1...	51	1295	56 1/4	1426	8 1/4	216	120	54	2680	44	200	5.7	200	5.7
D 2...	51	1295	56 1/4	1426	8	203	100	45	2400	39	175	5.0	175	5.0
D 3...	43	1092	48 1/4	1222	6 5/8	168	70	32	1350	22	100	2.8	100	2.8
CO ₂ Cylinders														
D 4...	51	1295	56 1/4	1426	8	203	100	45	2400	3	50	23	50	23
											20	9	20	9
Chlorine														
D 5...	36	914	41 1/4	1045	10	254	80	36	2480	41	100	45	100	45
D 6...	48	1219	53 1/4	1349	10	254	115	52	3500	57	150	68	150	68
D 7...	48	1219			11 1/4	292					200	91	200	91

High Pressure Cylinder Valves

ADAPTABILITY—These high pressure valves are efficiently used on oxygen-hydrogen or CO₂ cylinders; on medicinal oxygen and resuscitation cylinders; on chlorine cylinders.

High Pressure Oxygen-Hydrogen or CO₂ Cylinder Valves

CONSTRUCTION—Made with forged brass body and cast iron wheel handles; equipped with safety device to release at 2800 lb. pressure per square inch (197 kg./cm²).

SIZES—Built in American standard valve thread sizes.

SIZES—Built in American standard are 3/4 in. standard pipe size, being 1.025 in. O. D. (outside diameter) of thread at small end; 3/4 in. taper per foot; 14 threads per inch with perfect thread full length of one inch.

TABLE II. OUTLET THREADS

	O. D. of Threads	Threads per In.	Right or Left Hand
Oxygen...	.895 in.	14	R. H.
Hydrogen	.895 in.	14	L. H.
CO ₂	.825 in.	14	R. H.

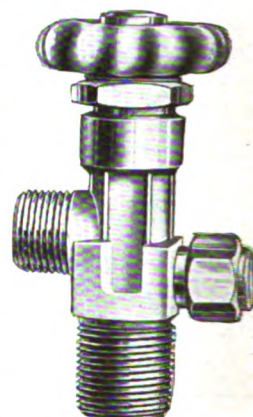


FIG. 2. HIGH PRESSURE CYLINDER VALVE
for Oxygen Hydrogen or CO₂

High Pressure Medicinal Oxygen and Resuscitation Cylinder Valves

CONSTRUCTION—Same construction as the oxygen valve and equipped with similar safety device.

CYLINDER THREADS—3/4 in. standard pipe thread. Outlet thread, .895 in. O. D. of thread, 14 threads per inch. Right hand.

Ideal Type Chlorine Cylinder Valve

A heavy massive valve made with forged brass body, cast iron wheel handle, and fitted with monel metal stem, non-corrosive in the presence of liquid chlorine. It is packed with pure asbestos impregnated with graphite; stem is revolving type, and all threaded or controlling parts are located above packing and removed from contact with the gas.

CYLINDER THREADS—3/4 in. standard pipe; 1.025 in. at small end, 3/4 in.

taper per foot; 14 threads per inch, perfect thread full length of one inch. Outlet, 1.041 in. O. D. Right hand.



FIG. 3. IDEAL TYPE OF CHLORINE CYLINDER VALVE

Standard Type Chlorine Cylinder Valve

Of same weight and type of body as the standard oxygen valve above described, but it has a non-revolving, non-corrosive monel metal stem, fusible metal safety plug (melting at 74° C.).

Cylinder thread: 3/4 in. standard taper pipe thread.

Outlet thread: 1/2 in. Briggs standard pipe thread.

Oxygen-Hydrogen Generating Equipment

The Oxygen Products Company is prepared to furnish oxygen-hydrogen generating plants complete with all accessories and details—ready for immediate installation and operation. A sample generating plant and a single cell are shown in the accompanying illustrations. Both oxygen and hydrogen of the maximum purity possible are guaranteed to be produced, at a rate of production higher than that of any type of similar apparatus now on the market. The operation of the cells is attended with absolute safety, while the machinery is running at its highest state of efficiency or at low or intermediate speeds, owing mainly to the utmost simplicity observed in the constructive design throughout as to detail of construction. The cost of production of oxygen and hydrogen has been greatly reduced, these generators being very much more economical in the use of fuel; and the maintenance charges are nominal by reason of the extreme durability of each part of the equipment.



FIG. 4. A SINGLE CELL

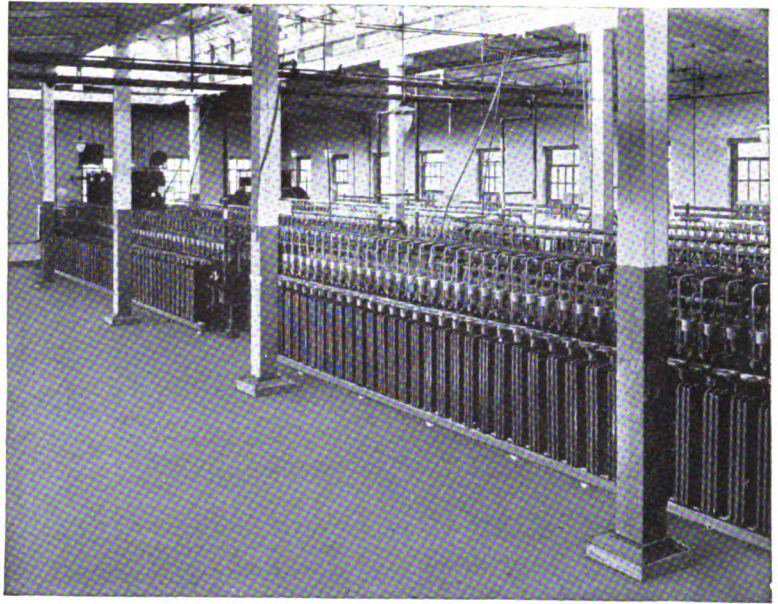


FIG. 5—INSTALLATION OF 800 OXYGEN-HYDROGEN GENERATING CELLS AT PLANT OF FELS & CO., PHILADELPHIA, PA.

Welding and Cutting Apparatus

These equipments are thoroughly practical, safe and economical. Furnished to meet various requirements of service. The regulators, set forth herewith, accurately and uniformly control the desired delivery of gases, while the safety features embodied in their construction are a guarantee against damage to surrounding property and injury to the operator.

The welding torch possesses a mixing principle that is scientific and modern in every respect, and is approved by the Underwriters' Laboratories of the National Board of Fire Underwriters.

For oxygen-hydrogen work, efficient torches and regulators are supplied for cutting and welding operations. See illustration of cutting torch.

Oxy-Acetylene and Oxy-Hydrogen Regulators

No. D201 — High pressure oxygen regulator designed for pressure from 5 lb. per sq. in. (0,351 kg./cm²) to 250 lb. per sq. in. (17,575 kg./cm²). Fitted with 3000 lb. per sq. in. (210,90 kg./cm²) high pressure gauge and 300 lb. per sq. in. (21,090 kg./cm²) low pressure gauge. Union nut to fit standard oxygen valve.

No. D202—Medium pressure oxygen regulator designed for pressure from 5 lb. per sq. in. (0,351 kg./cm²) to 175 lb. per sq. in. (12,303 kg./cm²). Fitted with 3000 lb. per sq. in. (210,90 kg./cm²) high pressure and 300 lb. per sq. in. (21,090 kg./cm²) low pressure gauges. See accompanying illustration.

No. D203—Low pressure oxygen regulator. Same as No. D202 except designed for pressure ranging from ½ lb.

per sq. in. (0,035 kg./cm²) to 75 lb. per sq. in. (5,273 kg./cm²). Fitted with 3000 lb. per sq. in. (210,90 kg./cm²) high pressure and 100 lb. per sq. in. (7,030 kg./cm²) low pressure gauges.

No. D204 — Hydrogen regulator. Same design and fittings as No. D202 except fitted with left hand union nut to fit standard hydrogen valve.

No. D205 — Acetylene regulator, to fit Prest-O-Lite cylinders. Fitted with 500 lb. per sq. in. (35,150 kg./cm²) high pressure and 50 lb. per sq. in. (3,515 kg./cm²) low pressure gauges.

No. D206 — Acetylene regulators to fit commercial acetylene cylinders. Fitted same as No. D205.

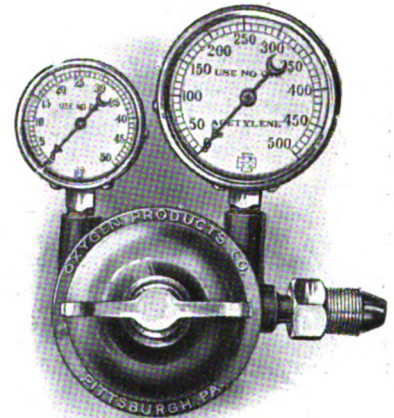


FIG. 7. NO. D205 ACETYLENE REGULATOR

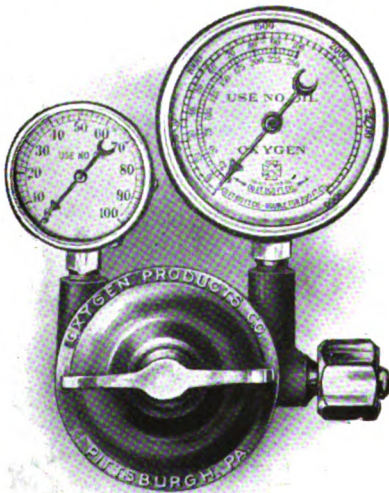


FIG. 6. NO. D-202 MEDIUM PRESSURE OXYGEN REGULATOR



FIG. 8. OXYGEN-HYDROGEN OR OXYGEN-ACETYLENE CUTTING TORCH

No. D101—A new torch of flawless design embodying rare mechanical precision and remarkable cutting efficiency.

Light in weight. Finest quality of materials.

Floating needle point valves throughout.

All parts are readily accessible and interchangeable.



FIG. 9. OXYGEN-ACETYLENE CUTTING TORCH

No. D102—This torch possesses many special advantages. It is made with the utmost precision and is very light. Scientific arrangement of the gas chambers affords a positive and accurately proportioned flame at a minimum pressure. No complicated parts.